

with this type of jigs provided they are carefully set up on the baseplate. At *F* in the member *B* is shown a boss; this is provided with a tapped hole for a hook or eye-bolt to facilitate moving the jig member by an overhead crane. The other members have tapped hole on the top for the same purpose.

Alignment of Jig when Holes are at an Angle. — In Fig. 12 is shown a boring jig for boring out the top frame *A* for adial drills. The design of the jig is simple, but effective; the hole

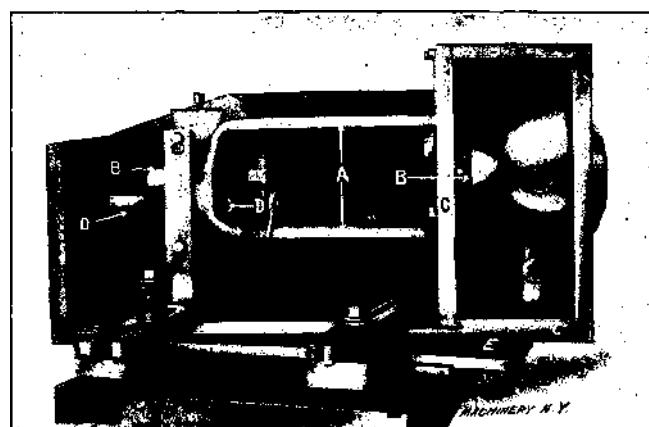


Fig. 12. Jig having

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*jB* is parallel with the finished side *C* of the jig and is bored out after the jig has been brought up square against a parallel and strapped to the machine table. The hole *D* is bored at an angle with the

hole *B*, and the setting of the jig for the boring out of this hole is facilitated by providing a wedge-shaped piece *E* of such an angle that the jig will be set in the proper position when moved up against the wedge. If universal joints are used for connecting the boring-bar with the driving spindle, the setting of the work at an angle could be omitted, although it is preferable even when using universal joints to have the boring-bars as nearly as possible in line with the spindle. This eliminates a great deal of the eccentric stress, especially when taking a heavy cut with coarse feed.